

REMARKS

Claims 1-24 are pending in this application. For purposes of expedition, claims 42-46 have been cancelled without prejudice or disclaimer, and their limitations have been incorporated into their respective base claims 1, 5, 13, 17 and 21 in accordance with current Office policy, to further define Applicants' disclosed invention and to assist the Examiner to expedite compact prosecution of the instant application.

For example, base claim 1 has been amended to incorporate "the navigation information [which] comprises identifiers for particular bitstreams and playback time information for the sub data corresponding to the main data" as defined in canceled claim 42. Similarly, base claim 5 has been amended to incorporate all of the limitations from canceled claim 43. Likewise, base claim 13 has been amended to incorporate all of the limitations from canceled claim 44. Base claims 17 and 21 have also been amended to incorporate all of the limitations from canceled claims 45-46. As a result, entry of the foregoing amendments is proper under 37 C.F.R. §1.116(b) because those amendments simply respond to the issues raised in the final rejection, and incorporate limitations which have already been considered by the Examiner. No new issues are raised. No further search is required, and the foregoing amendments are believed to remove the basis of the outstanding rejections and to place all claims in condition for allowance.

Turning now to the substance of the final Office Action, claims 1-4, 5-24, and 42-46 stand finally rejected under 35 U.S.C. §102(e) as being anticipated by Suzuki, U.S. Patent No. 6,763,178 for reasons stated on pages 2-10 of the final Office Action. However, Applicants respectfully traverse the rejection for the following reasons.

First of all, as discussed previously, base claims 1, 5, 13, 17 and 21 have been amended to incorporate limitations of canceled claims 42-46, defining example specifics of the "navigation information" that define not only the relation required for the main data and the sub data and/or extra data to be reproduced in synchronization with each other, but also "identifiers for particular bitstreams and playback time information for the sub data and/or extra data corresponding to the main data." As previously explained, such navigation information refers to control information required for searching and controlling multimedia contents stored in storage media.

In contrast to Applicants' base claims 1, 5, 13, 17 and 21, Suzuki '178 only discloses a method and apparatus, as shown in FIG. 1, for recording video with superimposed sub-information. According to Suzuki '178, graphics data representing sub-images such as subtitles

can be superimposed with main images of the video data. However, a personal computer (PC) 31, as shown in FIG. 1, is used to allow the user to specify when and where (on the main image) the sub-images are to be superimposed.

During recording, main data consisting of main video and audio data is compression encoded, multiplexed and recorded on a record medium 1, such as a magnetic or optical disk, as shown in FIG. 1, via an encoder 18, as shown in FIG. 13. In contrast to the main data, sub-image data is separately arranged and recorded on the recording medium 1 as one or more graphics files separate from the main data, where the sub-image data represents sub-images (graphics data) to be superimposed with the main data. Those sub-image data files, i.e., graphics data files, are arranged in a directory, known as "GRAPHICS" directory, as shown in FIG. 2.

During reproduction, the sub-image data (graphics data file) is read from the record medium at different times than the main data, and buffered separately. An adder 12, as shown in FIG. 1, is then used to combine the main data supplied from audio/video decoders 10 and 11, and the sub-image data (graphics data file) from the graphics decoder 15 and generate composite video data to be displayed. Since the arrangement and recording of the sub-image data (graphics data) are done in separate files from the main data, editing and playback operations of such sub-image data (graphics data file) can be simplified. See Abstract; col. 2, lines 63-65. Various editing techniques for only the sub-image data (graphics data files) are shown in FIGS. 5-10, in which different pages of sub-information can be edited, such as Page A, Page B and Page C, shown in FIGS. 3A-3B and FIGS. 7A-7B, or Page A, Page B, Page C and Page D, as shown in FIGS. 5A-5B. Editing tasks may include page editions, deletions and splitting.

For example, as shown in FIG. 5, a Page D is added between Pages B and C, i.e., the presentation time of Page D is to lie between that of Pages B and C. Changes can be made at each individual page.

However, there is **no** disclosure anywhere in Suzuki '178 of Applicants' claimed "navigation information [used to define] a relation required for the main data and the sub data to be reproduced in synchronization with each other" as defined in base claims 1 and 5, or alternatively, "a relation required for the read main data and sub data to be reproduced in synchronization with each other and for the read main data and extra data to be reproduced in connection with each other" as defined in base claims 17 and 21. More importantly, there is **no**

disclosure anywhere in Suzuki '178 of Applicants' claimed "navigation information" as comprising "identifiers for particular bitstreams and playback time information for the sub data and/or extra data corresponding to the main data" as expressly defined in each of Applicants' base claims 1, 5, 13, 17 and 21.

Nevertheless, on page 3 of the final Office Action, the Examiner asserts that the GRAPHICS_HEADER files, as shown in FIG. 2 and described on col. 6, 26-67 of Suzuki '178, correspond to Applicants' claimed "navigation information," and that the "ATS and PTS" included in the GRAPHIC_HEADER files are used for synchronization purposes. However, the Examiner's assertions are factually incorrect and should be withdrawn.

Col. 6, 26-67 of Suzuki '178 refers to the directory for storing a listing of graphics data files, i.e., sub-image files, including, for example, ID, number information, page information, ATS and PTS information. According to Suzuki '178, ATS (Arrival Time Stamp) is the time that the initial byte of a page of sub-image is to arrive at a code buffer 14, as shown in FIG. 1 for temporary storage. By way of example, a clock frequency of 90 KHz can be used for the ATS to establish the arrival times. In contrast to ATS, PTS (Presentation Time Stamp) shows the decode start time for that page, indicating the time at which decoding and nearly simultaneous display of the page is to begin. The PTS may also use a clock frequency of 90 KHz.

Therefore, both the ATS and PTS are **not** used for synchronization purposes relative to the main data, as incorrectly alleged by the Examiner; rather, these ATS and PTS are used to ensure the page to occupy in the code buffer 14, as shown in FIG. 4A, and to provide a display time, as shown in FIG. 4B.

Moreover, the GRAPHICS_HEADER files are **not** used to define relation between the main data and the sub data to be reproduced in synchronization, as incorrectly allegedly by the Examiner; rather, these GRAPHICS_HEADER files are used to allow the user to perform editing tasks such as page editions, deletions, and splitting, only with respect to the individual page of sub-images.

More importantly, no where in Suzuki '178 is there, and the Examiner has **not** addressed, disclosure of Applicants' claimed "navigation information" as comprising "identifiers for particular bitstreams and playback time information for the sub data and/or extra data corresponding to the main data" as expressly defined in each of Applicants' base claims 1, 5, 13, 17 and 21.

In view of these noted deficiencies of Suzuki '178, Applicants respectfully request that the rejection of claims 1-4, 5-24 and 42-46 be withdrawn.

In view of the foregoing amendments, arguments and remarks, all claims are deemed to be allowable and this application is believed to be in condition to be passed to issue. Should any questions remain unresolved, the Examiner is requested to telephone Applicants' attorney at the Washington DC office at (202) 216-9505 ext. 232.

INTERVIEW:


In the interest of expediting prosecution of the present application, Applicants respectfully request that an Examiner interview be scheduled and conducted. In accordance with such interview request, Applicants respectfully request that the Examiner, after review of the present Amendment, contact the undersigned local Washington, D.C. attorney at the local Washington, D.C. telephone number (202) 216-9505 ext. 232 for scheduling an Examiner interview, or alternatively, refrain from issuing a further action in the above-identified application as the undersigned attorneys will be telephoning the Examiner shortly after the filing date of this Amendment in order to schedule an Examiner interview. Applicants thank the Examiner in advance for such considerations. In the event that this Amendment, in and of itself, is sufficient to place the application in condition for allowance, no Examiner interview may be necessary.

To the extent necessary, Applicants petition for an extension of time under 37 CFR §1.136. If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 503333.

Respectfully submitted,

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